

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed September 10, 2004. In the Office Action, claims 1, 7, 8, 13, 14 and 19 were rejected under 35 U.S.C. § 112, (ii) claims 1-19 were rejected under 35 U.S.C. § 102, and (iii) claims 5, 6, 11, 12, 17, and 18 were rejected under 35 U.S.C. § 103. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Specification

In the specification, the Abstract has been amended to correct a minor editorial problem. Applicants respectfully request withdrawal of the objection to the Specification.

Claim Objections

The Office Action cited objections to Claims 1, 8, and 14 based on alleged informalities. Claims 1 and 8 have been cancelled without prejudice. The alleged informality has been removed from claim 14. Therefore, withdrawal of the objection is respectfully requested.

Rejection Under 35 U.S.C. § 112

Claims 1, 7, 8, 13, 14 and 19 were rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. Claims 1 and 8 have been cancelled without prejudice. The alleged informality has been removed from claim 14. Claims 7, 13 and 19 are directed to the updating of the branch frequency, which is set forth at pages 11 and 12 of the specification. Applicants respectfully request the Examiner to reconsider claims 7, 13 and 19 and withdraw the outstanding rejection in its entirety.

Rejection Under 35 U.S.C. § 102

Claims 1-4, 7-10, 13-16 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Patel-Lumetta's "replay: a Hardware Framework for Dynamic Program Optimization," December 1999 ("rePlay"). Applicants respectfully traverse the rejection because the limitations of claim 5 and 11 have been placed into independent form. As a result, claims 1 & 4 and claims 8 and 10 have been cancelled without prejudice. Claim 14 has been amended to include the limitations of claim 18. Hence, withdrawal of the §102(b) rejection is requested.

Rejection Under 35 U.S.C. § 103

Claims 5, 6, 11, 12, 17, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over rePlay, as applied to the base and intervening claims, in view of Patel-Evers-Patt, Improving Trace Cache Effectiveness with Branch Promotion and Trace Packing ("Patel"). Applicants respectfully traverse the rejection because a *prima facie* case of obviousness has not been established.

As the Examiner is aware, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the combination of prior art references must teach or suggest all of the claim limitations. *See MPEP §2143, p.2100, 124 (8th Ed., rev.1, Feb 2003); see also In Re Fine, 873 F. 2d 1071, 5 U.S.P.Q.2D 1596 (Fed. Cir. 1988).* Herein, third criterion has not been established because neither replay nor Patel, alone or in combination, describe or suggest (1) improving performance of the computer program further by (i) *selecting a seed block, duplicating the seed block, and growing the seed block to form a region, and (ii) trimming blocks near a head block of the region to form a trimmed region of having improved scheduling cycles*, or (2) improving performance of the computer program by (i) *selecting a seed block, duplicating the seed block, and growing the seed block to form a region, and trimming blocks near a tail block of the region.* Emphasis added.

Applicants respectfully request the Examiner to reconsider and withdraw the outstanding §103(a) rejection.

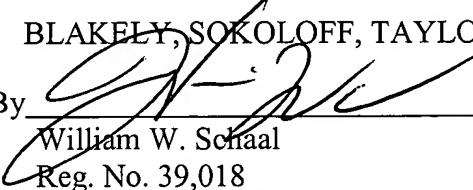
Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 12/06/2004

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Attachments

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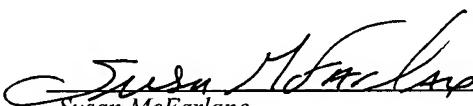
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Susan McFarlane

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Amendments to the Drawings:

The attached sheet of drawings includes changes to FIG. 2. This sheet, which includes FIG. 2, replaces the original sheet including FIG. 2. In FIG. 2, the instruction “ASSERT a == 2” in block 235 has been labeled with reference number --260--. It is noted that FIG. 1 does not constitute prior art because the aspects of the invention are incorporated therein. Applicants respectfully request reconsideration of the objection of FIG. 1

Attachment: Replacement Sheet